

8.13 Waste Management

This section presents an evaluation of the potential environmental and human health effects related to hazardous and nonhazardous wastes generated by the proposed GWF Tracy Peaker Project (TPP). Section 2.0 of this Application for Certification (AFC) provides a full project description. This section discusses the environmental condition of the proposed TPP site and issues related to the generation, handling, and disposal of wastes.

8.13.1 Environmental Condition of Site

GWF Energy LLC proposes to build and operate the Tracy Peaker Project (TPP), a nominal 169-megawatt (MW) simple-cycle power plant, on a nine-acre, fenced site within a 40-acre parcel in an unincorporated portion of San Joaquin County. The site is located immediately southwest of Tracy, California, and approximately 20 miles southwest of Stockton, California. The TPP would consist of the power plant, an onsite 230-kilovolt (kV) switchyard, an approximately five-mile, 230-kV electric transmission line, an approximately 1,470-foot water supply pipeline (as measured from the fence line), an onsite natural gas supply interconnection, and improvements to an existing dirt access road approximately one mile in length. An approximately 5.2-acre area west of the plant fence line and within the 40-acre parcel would be used for construction laydown and parking. Figure 2-1 shows the regional location of the GWF site. Figure 2-2 shows the immediate site location of the GWF project, including the location of the proposed generating facility and the proposed transmission, water supply, and access routes.

Land use in the surrounding area is primarily agricultural and industrial. There is a glass container manufacturing facility just north of the railroad tracks, and a biomass plant north of the glass container facility. Land use in the area of the TPP facility is discussed in more detail in Section 8.4 of this AFC. The topography of much of the site and surrounding area is flat.

A Phase I Environmental Site Assessment of the 40-acre parcel was performed by Harding ESE (Harding, 2001) and can be found in Appendix G. The Phase I Site Assessment established that no adverse environmental conditions exist at the TPP site.

8.13.2 Waste Generation, Storage, and Handling

This section describes the wastes that would be produced during the construction and the operations and maintenance phases of the TPP, and the storage and handling facilities associated with these wastes. Waste categories include sanitary wastewater, nonhazardous solid and liquid wastes, and hazardous solid and liquid wastes.

8.13.2.1 Construction Phase

Both nonhazardous and hazardous wastes would be generated during the construction phase of the proposed project. Only small volumes of hazardous wastes would be generated and, when handled properly, neither nonhazardous nor hazardous wastes would significantly impact the environment or human health.

Nonhazardous Wastes. The types of nonhazardous wastes that would be generated during the construction phase of the TPP primarily include debris and other materials requiring removal. These materials would consist of paper, wood, glass, plastics, excess concrete, scrap metal, calcium silicate insulation, mineral wool insulation, empty nonhazardous material containers, steel cuttings, packaging metal, absorbent materials, and electrical wiring waste. Approximately 40 cubic yards of these loosely packed materials would be generated weekly during construction. Recycling of waste materials such as scrap metal, copper wire, empty containers, and absorbent materials would be maximized. Approximately 20 cubic yards of wastes would be recycled every two to three weeks during construction. The remaining wastes would be placed into covered, temporary storage containers for periodic removal and disposal at an offsite Class II or III facility.

Some nonhazardous wastewater would also be generated during the construction phase of the TPP. This wastewater would consist of sanitary wastewater, equipment wash water, and stormwater runoff. Sanitary waste would be collected in portable chemical toilets and would be removed from the site and disposed of periodically by licensed contractors. Equipment wash and flushing water would be collected and contained in specially designated areas and would be recycled where feasible or removed from the site for appropriate treatment and disposal.

Stormwater runoff would be managed appropriately, in accordance with best management practices (BMPs).

All nonhazardous wastes generated during the construction phase would be handled, stored on site temporarily, and disposed of according to standard procedures and all applicable laws, ordinances, regulations, and standards (LORS).

Hazardous Wastes. Hazardous waste that may be generated during the construction phase of the proposed project include small amounts of contaminated soil or other solids and small volumes of waste oil, waste glycol, cleaning fluids, solvents, paints, batteries, lighting lamps, and welding materials. Many of these wastes would be recycled under the “excludable recyclable” provision of Title 22 of the California Health and Safety Code. The wastes that require disposal would be characterized based on generator knowledge or analytical testing to determine the appropriate management and handling procedures. Once properly characterized, the wastes would be temporarily stored at the site in appropriate containers, according to all applicable hazardous waste storage LORS. A contract licensed hazardous waste hauler would remove the wastes from the TPP in a timely manner. Wastes would be managed appropriately at a recycling/transformation facility or an offsite Class I Treatment, Storage, or Disposal Facility (TSDF).

The construction contractor would be considered the generator of the hazardous wastes and would be responsible for appropriate handling, storage, transfer, and disposal. Hazardous wastes would be stored on site for less than 90 days, in accordance with all applicable LORS. The estimated volume of hazardous wastes generated during the construction phase of the project is listed in Table 8.13-1.

All hazardous wastes generated during the construction phase would be handled and disposed of according to standard procedures and applicable LORS. When handled properly, these hazardous wastes would not impact the environment or human health.

8.13.2.2 Operations and Maintenance Phase

Both nonhazardous and hazardous wastes would be generated during the operations and maintenance phase of the TPP. The primary waste would be nonhazardous wastewater. These wastes and their estimated quantities are discussed below.

Nonhazardous Wastes. The types of nonhazardous wastes that would be generated during the operations and maintenance phase of the TPP include sanitary wastewater, surface water runoff, solid maintenance wastes, and standard office wastes. Where appropriate, wastes would be recycled; the remaining wastes would be placed into appropriate storage containers and periodically removed from the site.

All sanitary wastewater would be routed to the onsite septic tank/leach field. All other wastewater generated would be handled and disposed of according to standard procedures and all applicable LORS.

Water collected from the off-line combustion turbine compressor washing would drain to a wastewater holding tank and be disposed off site. Wastewater from various drains would be connected to an oil-water separator unit. The clean water separated from the oil-water separator would be recycled on site for process water or discharged to the waste water management system. On-line wash of the combustion turbine generators with demineralized water would not generate waste water. Stormwater collected from areas of the plant not subject to oil contamination would drain to an onsite evaporation/infiltration detention basin.

The facility would produce solid wastes from maintenance and office that are activities typical of industrial facilities. These wastes include rags, broken and rusted metal and machine parts, defective or broken electrical materials, empty containers, pallets and wood materials, and other solid wastes. Where appropriate, wastes would be recycled; the remaining wastes would be placed into covered, temporary storage containers and periodically removed for disposal at an offsite Class III facility.

All nonhazardous wastes generated during the operations and maintenance phase would be handled and disposed of according to standard procedures and all applicable LORS.

Hazardous Wastes. Types of hazardous waste that would be generated during the operations and maintenance phase of the proposed TPP include selective catalytic reduction (SCR) catalyst, waste oils, and other maintenance wastes (Table 8.13-2). Many of these wastes would be recycled under the “excludable recyclable” provisions of Title 22 of the California Health and Safety Code. The wastes that require disposal would be characterized based on generator knowledge or analytical testing to determine the appropriate management and handling procedures. Once properly characterized, the wastes would be temporarily stored at the site in appropriate containers, according to all applicable hazardous waste storage LORS. A contract licensed hazardous waste hauler would remove the wastes from the TPP in a timely manner. Wastes would be managed appropriately at a recycling/transformation facility or an offsite Class I TSDF. The handling, storage, transfer, and disposal of hazardous wastes would comply with all applicable LORS. When handled properly, the hazardous wastes generated during the operations and maintenance phase of the proposed project would not impact the environment or human health.

It is estimated that approximately 525 cubic feet of waste SCR and/or carbon monoxide (CO) catalyst would be generated every three to five years. The catalysts would be returned to the manufacturer for metals reclamation and/or disposal. Other hazardous wastes expected to be generated at the TPP during operations and maintenance include paint and thinner waste, lead acid batteries, natural gas filters, consumer-type batteries, spent sandblast media, and nonempty aerosol cans. A description of these wastes is included in Table 8.13-2. Heavy metals are present in the SCR and CO catalysts, causing the catalysts to be considered hazardous wastes if they are not recycled.

The combustion turbine has a capacity of 7,400 gallons for lubricating oil. It is estimated that this volume of lubricating oil would be replaced every six years. These oils must be replaced to ensure proper operation of the turbines. Approximately 300 gallons of waste oils from other equipment would be generated annually. These oils would be recycled where feasible. Glycol used in cooling system for the combustion turbine generator cooling system would be replaced periodically and would be recycled when appropriate.

Properly trained personnel would be present during the handling of all hazardous materials/wastes in the event of an accidental release.

All hazardous wastes generated during the operations and maintenance phase would be handled and disposed of according to standard procedures and all applicable LORS.

8.13.3 Waste Disposal Sites

This section reviews the nonhazardous and hazardous waste disposal facilities that may feasibly be used for disposal of wastes associated with the TPP.

8.13.3.1 Nonhazardous Waste Disposal Facilities

Nonhazardous wastes would be removed from the site periodically for disposal or recycling. Livermore-Dublin Disposal, a subsidiary of Waste Management Inc., provides garbage collection services in the TPP area, but does not provide pickup services for recyclable materials. The Vasco Road Landfill and the Pleasanton Garbage Service Transfer Station have recycling bins where materials can be dropped off. The landfill used by Livermore-Dublin Disposal is the Vasco Road Landfill in Livermore. Vasco Road Landfill has adequate capacity to handle and dispose of solid waste generated by the TPP. The most likely alternative to the Vasco Road Landfill is the Altamont Landfill and Resource Recovery Facility in Livermore. Currently, there are no enforcement actions against these two sanitary landfills that could affect future availability of these facilities (Moroz, 2001).

Vasco Road Sanitary Landfill. This Class II/III disposal facility is located four miles north of Livermore, off Interstate 580 at North Vasco Road, approximately 15 miles from the proposed TPP site. This facility is owned and operated by the Republic Services of California. Accepted waste types include construction and demolition waste, contaminated soil, green materials, industrial waste, tires, and mixed municipal waste. The facility has a remaining capacity of 10.9 million cubic yards (Clark, 2001).

Altamont Landfill and Resource Recovery Facility. This Class II/III disposal facility is located on Altamont Pass Road, four miles north of Interstate 580 near Altamont, approximately 10 miles from the proposed TPP site. This facility is owned and operated by the Alameda County Waste Management Department. Accepted waste types include asbestos, ash, construction and demolition waste, mixed municipal waste, industrial waste, and tires. The facility has a remaining capacity of 12.3 million cubic yards (SWIS, 2001).

8.13.3.2 Hazardous Waste Disposal Facilities

The hazardous waste generated from this project would be disposed of at a nearby hazardous waste TSDF. In California, there are three major commercial Class I disposal facilities that accept hazardous wastes. The status of these facilities is summarized below.

Chemical Waste Management Kettleman Hills Facility (EPA ID# CAT000646117). This permitted Class I disposal facility is located in Kings County off Highway 41 west of Kettleman City. It is approximately 150 miles from the proposed TPP site. The categories of wastes handled at this facility include organic sludges and solids, polychlorinated biphenyls (PCBs) with a concentration of less than 50 parts per million (ppm), pesticides, cyanide and sulfide reactives, halogenated and nonhalogenated solvents, substances with metals that exceed the Toxicity Characterization Leaching Procedure (TCLP) limits and/or California hazardous waste limits, and waste acids, caustics, and oil. Onsite treatment and disposal methods include evaporation, landfilling, neutralization, pesticide hydrolysis, and stabilization. The facility has a permitted capacity of 10.7 million cubic yards, with future plans to increase the capacity to 16.7 million cubic yards. Currently, the remaining capacity is 6 million cubic yards. If the current intake volume remains constant, the estimated closure date is 2007. However, the proposed expansion would extend the closure date to the year 2013. The facility is not involved in any major cleanup actions that could affect the future availability of the facility (Yarborough, 2001).

Safety-Kleen® Environmental Services (Formerly Laidlaw Environmental Services) Buttonwillow Facility (EPA ID# CAD980675276). This permitted Class I disposal facility is located in Kern County on Lockern Road between Highways 33 and 58, near Buttonwillow. The facility is approximately 250 miles from the proposed TPP site. The categories of wastes handled at this facility include aqueous wastes, contaminated soil, inorganic and organic sludges, PCBs with a concentration of less than 50 ppm, cyanide and sulfide reactives, and substances with metals exceeding the TCLP limits and/or California hazardous waste limits. Onsite treatment and disposal methods include evaporation, landfilling, and solidification/stabilization. The facility has a permitted capacity of 13.8 million cubic yards and a remaining capacity of 10.85 million cubic yards. The estimated closure date is 2036.

Currently, the facility is not involved in any major cleanup actions that could affect the future availability of the facility (Buona, 2001).

Safety-Kleen® Environmental Services (Formerly Laidlaw Environmental Services) Imperial Valley Disposal Facility (EPA ID# CAD000633164). This permitted Class I disposal facility is located in Imperial County, approximately seven miles west of Westmoreland on Highway 86. It is approximately 500 miles from the proposed TPP site. The categories of wastes handled at this facility include aqueous wastes, contaminated soil, inorganic and organic sludges and solids, latex paint sludges, PCBs with concentrations of less than 50 ppm, pesticides, substances with metals that exceed the TCLP limits and/or California hazardous waste limits, waste acid, waste caustic, and oil sludges. Onsite treatment and disposal methods include landfilling, microencapsulation, neutralization, and solidification/stabilization. After planned construction of two additional land disposal cells (2.6 million cubic yards), the facility will have a permitted capacity of 6.1 million cubic yards. The current available capacity is approximately 2.5 million cubic yards. The current annual usage is approximately 115,000 cubic yards. Based on this annual usage, the current estimated closure date is 2020. With construction of the two additional cells, the estimated closure date is 2050. Currently, the facility is not involved in any major cleanup actions that could affect the future availability of the facility (Smith, 2001).

8.13.3.3 Waste Recycling Facilities

The Vasco Road Landfill and the Pleasanton Garbage Service Transfer Station have recycling bins where nonhazardous materials can be dropped off.

8.13.3.4 Waste Disposal Impacts

This section describes the potential impacts that the proposed TPP may have on the aforementioned hazardous and nonhazardous waste disposal capacities. Many of the wastes generated by the TPP would be recycled, minimizing the amount of wastes for disposal and minimizing impacts on waste disposal capacities.

Nonhazardous Waste Impacts. It is anticipated that nonhazardous waste disposal from the proposed TPP would not significantly decrease the capacity of the waste

disposal facilities used by the project. With active waste recycling efforts in place, along with the currently available Class II or III waste disposal capacity, the incremental decrease in available waste disposal capacity resulting from the proposed TPP can be considered insignificant.

Hazardous Waste Impacts. It is anticipated that hazardous waste disposal from the proposed TPP would not significantly decrease the capacity of the waste disposal facilities used by the project. With active waste recycling efforts in place, along with the currently available Class I waste disposal capacity, the incremental decrease in available waste disposal capacity resulting from the proposed TPP can be considered insignificant.

8.13.4 Waste Mitigation Measures

No significant impacts are anticipated from the handling and management of wastes generated at the TPP facility. The handling and management of the waste would follow the hierarchy approach of waste reduction set forth in Public Resources Code (PRC) Section 40000 et seq. (i.e., source reduction, waste recycling, and waste disposal). A plan, as well as associated performance reports, would be prepared for reducing the generation of hazardous waste. These best management practices (BMPs) would ensure that there are no significant impacts resulting from the project.

During the construction and the operations and maintenance phases of the project, minor quantities of nonhazardous wastes would be generated. With proper mitigation measures, a significant portion of these wastes can be diverted from the local Class II or III disposal facility. Where feasible, these wastes would be recycled or reused.

The mitigation measures for hazardous wastes are as follows:

WM-1. Prior to initiation of the project construction phase, construction employees will receive hazardous-waste-related training that focuses on recognition of potential contaminated soil and/or groundwater (e.g., that may be encountered during subsurface excavations for foundations or pipeline trenches) and contingency procedures to be followed to protect worker safety and public health.

WM-2. A detailed waste management plan will be prepared prior to startup to ensure proper storage, labeling, packaging, record keeping, manifesting, minimization, and disposal of all hazardous materials and wastes. The waste management plan will include:

- A description of each hazardous waste stream
- Handling, transport, treatment, and disposal procedures for each waste
- Preparedness, prevention, contingency, and emergency procedures
- Personnel training

WM-3. Prior to facility startup, an application will be made to the California Department of Toxic Substances Control (DTSC) for a hazardous waste generator number. The facility will not treat, store, or dispose of hazardous waste in a manner that will cause the facility to be characterized as a TSDF.

WM-4. All hazardous wastes will be stored onsite for less than 90 days (or other accumulation periods as allowed by 22 California Code of Regulations [CCR] 66262.34 for hazardous waste generators) and will be managed in accordance with state and federal hazardous waste generator requirements. Hazardous wastes, as well as hazardous materials that are spilled or otherwise become unsuitable for use, will be stored in an appropriately segregated hazardous waste storage area. Hazardous waste will be stored in a commercially available storage shed with integral secondary containment or in a sealed concrete hazardous waste storage area to control leaks and spills. Secondary containment areas will be sized to hold a volume equal to at least 110 percent of the largest tank (or container).

If hazardous wastes are stored out-of-doors, the secondary containment structure will also have a volume equal to at least the capacity of the largest tank (or container) plus the volume of rainfall from a 25-year, 24-hour storm event, or will be covered to prevent rainwater from collecting in the containment basin. The hazardous waste storage area will be inspected and maintained frequently. Inspections and maintenance activities will be documented.

WM-5. Hazardous wastes will be transported by a licensed hazardous waste transporter and disposed of at an offsite hazardous waste facility. Hazardous wastes will be transported off site using hazardous waste manifests. Copies of manifests, reports, waste

analyses, exception reports, land disposal restriction notices/certifications, destruction certifications, etc. will be kept on site and accessible for inspection for three years.

WM-6. A spill control and management plan will be developed for the TPP before commercial operation. The purpose of the spill control and management plan is to avoid accidental mixing of incompatible chemicals and spills during transfer of chemicals. The design features for the spill control and management plan will include the secondary containment, collection, and treatment systems. The spill control and management plan is further discussed in Section 8.12, Hazardous Materials Handling.

WM-7. Facility employees will receive hazardous materials training as required by the Occupational Safety and Health Administration's (OSHA) Hazard Communication Standard. Additionally, employees will be trained in hazardous waste procedures, spill contingencies, and waste minimization procedures. Hazardous waste training will include, but not be limited to, the following subjects:

- Hazardous waste characteristics
- Use and management of containers
- Waste packaging
- Marking and labeling
- Accumulation/storage areas
- Inspections
- Preparedness and prevention
- Emergency equipment
- Contingency plan
- Emergency response procedures
- Hazardous waste manifesting
- Spill response and containment
- Waste minimization

WM-8. Procedures to minimize hazardous waste generation will be established. Employees will be trained in procedures to reduce the volume of hazardous waste generated at the TPP. The procurement of hazardous materials will be controlled to minimize surplus materials on site and to prevent unused materials from becoming “off-spec.” Nonhazardous materials will be used in lieu of hazardous materials whenever possible. Hazardous materials will be reused whenever possible. Hazardous wastes will be recycled whenever possible.

Environmental impacts related to waste management issues caused by the construction (including pipelines and transmission facilities) and operation of the TPP are expected to be minimal. Therefore, extensive monitoring programs are not required. The volumes and characteristics of waste generated during construction and operation of the proposed TPP will be monitored in accordance with requirements stipulated in appropriate regulatory permits obtained for the project.

8.13.5 Facility Closure Issues

The proposed TPP could experience either temporary or permanent closure. Temporary closure could occur due to general facility maintenance; replacement of one or more critical operating components of the facility; a disruption in the supply of critical natural gas, chemicals, or labor; or an event beyond the control of plant operators (e.g., flooding, earthquake, fire, etc.). Permanent closure of the facility could occur for similar reasons, but could also include such causes as facility obsolescence, irreparable damage to the facility, economic forces, or other unforeseen causes. The waste management issues associated with the temporary or permanent closure of the TPP are discussed below. Section 4.0 (Facility Closure) provides additional information regarding closure issues.

8.13.5.1 Temporary Closure

In the event of an unforeseen temporary closure of the facility in which there is no accidental release of hazardous materials, a contingency plan for cessation of operations would be implemented. This plan would be prepared before the facility begins operation. The plan would ensure that, throughout temporary closure, all facility operations comply with applicable LORS. Depending on the length of the closure, hazardous materials may be eliminated from the

facility by removing materials from their respective storage containers and/or by halting delivery of hazardous materials. In the former case, wastes removed from their storage containers would be disposed of according to applicable LORS. It is also possible that temporary closure of the facility could lead to the cessation of waste-generating activities. In this case, periodic removal of wastes from the facility would be halted until needed again.

If an unforeseen temporary closure in the facility results in an accidental release of hazardous materials, procedures set forth in the Hazardous Materials Business Plan (HMBP), as described in Section 8.12 (Hazardous Materials Handling), would be followed. The HMBP would be prepared before the facility begins operation. The HMBP would ensure that appropriate measures are developed to respond to an accidental release of hazardous materials, clean up hazardous materials, and notify authorities and the public of the release of hazardous materials.

8.13.5.2 Permanent Closure

Management of hazardous and nonhazardous wastes for permanent facility closure would be addressed in the general closure plan. At the time of permanent closure, waste management would maximize recycling efforts to prevent an excess of waste generation resulting from the closure. Unused chemicals would be sold back to the suppliers, other purchasers, or users. All equipment containing hazardous material residue would be decommissioned, according to a decommissioning plan that would be prepared at the appropriate time, to protect the environment and human health. All nonhazardous wastes would be removed from the facility and disposed of in a Class II or III facility.

8.13.6 Cumulative and Indirect Impacts

The nonhazardous waste generated at the TPP would add to the total waste generated in Alameda and San Joaquin Counties in California. However, there are adequate recycling facilities and landfill capacities to dispose of the waste from Alameda and San Joaquin Counties over the next 40 to 50 years. The impact of the solid waste generated by the plant is therefore not considered significant. No significant, indirect impacts on nonhazardous waste disposal or recycling from materials suppliers are anticipated.

The hazardous waste generated at the facility would be recycled and treated to the extent possible. California has more than adequate treatment and disposal capacity for the hazardous wastes that cannot be recycled. No significant, indirect impacts on hazardous waste disposal or recycling from materials suppliers are anticipated.

8.13.7 Monitoring

Because the environmental impacts caused by the construction and the operations and maintenance of the TPP are expected to be minimal, extensive monitoring programs are not required. Generated wastes would be monitored throughout the life of the plant in accordance with permit requirements.

8.13.8 Laws, Ordinances, Regulations, and Standards

The following section lists the LORS that apply the hazardous waste storage, handling, and disposal activities of the proposed TPP. These LORS are in place to protect employees, the environment, and the surrounding community from exposure to hazardous and nonhazardous wastes.

A discussion of the LORS is presented in this section. The jurisdiction, authority, and administering agency of each of the LORS applicable to the TPP are presented in Table 8.13-4. Table 8.13-4 also provides a specific reference to sections of the Waste Management section where conformance with each applicable LORS is discussed.

Proposed conditions of certification are contained in Appendix K. These conditions are proposed in order to ensure compliance with applicable LORS and/or to reduce potentially significant impacts to less-than-significant levels.

8.13.8.1 Federal LORS

Hazardous and nonhazardous wastes are governed in part by the Resource Conservation and Recovery Act (RCRA). As required by RCRA, an application for a hazardous waste generator identification number would be coordinated through the U.S. Environmental Protection Agency (EPA) and the DTSC.

40 Code of Federal Regulations (CFR) Parts 260–272 govern the generation, transportation, treatment, storage, and disposal of hazardous waste through a comprehensive management system. These sections also list the characteristics of hazardous wastes, including ignitability, corrosivity, reactivity, and toxicity. Subtitle D of these parts grants authority for regulating nonhazardous waste to the state.

49 CFR Parts 172, 173, and 179 provide standards for labels, placards, and markings on hazardous waste shipments by truck, and standards for packaging hazardous wastes.

42 United States Code (USC) 6922 sets standards for generators of hazardous waste regarding record keeping, labeling practices, informing hazardous waste transporters of general composition of wastes, use of a manifest system, and reporting requirements from the generators.

8.13.8.2 State LORS

The Hazardous Waste Control Act (HWCA) of 1972 is codified in Section 25100 et seq. of the California Health and Safety Code (H&SC). Regulations addressing the management of hazardous wastes are found in Title 22 CCR 66001 et seq. These management issues include:

- Characterizing wastes
- Obtaining a waste identification number
- Implementing a waste reduction program
- Manifesting wastes
- Packaging and labeling of wastes
- Record keeping
- Monitoring
- Emergency preparedness

22 CCR 67100, Hazardous Waste Source Reduction and Management Review, requires waste generators, as specified by the quantities of hazardous waste generated, to develop

a plan for reducing their hazardous wastes. Then, if applicable, generators must prepare a hazardous waste management performance report every four years.

H&SC Section 25500 et seq. (Hazardous Materials Business Plans) require emergency response plans from facilities that store hazardous materials in excess of 55 gallons, 500 pounds, and 200 cubic feet, as appropriate. Hazardous wastes or mixtures of hazardous wastes are included in the definition of hazardous materials. Inventories prepared in accordance with this requirement would include information on hazardous wastes.

Nonhazardous wastes are governed in part by the California Integrated Waste Management Act of 1989, which is found in PRC Section 40000 et seq. This law serves as a guide for an integrated statewide system of solid waste management, which includes efforts for solid waste handling, disposal, source reduction, recycling, and land disposal safety.

22 CCR 66260–66270 establish hazardous waste regulations for generators and transporters of hazardous wastes, and owners of hazardous waste TSDFs.

The Porter-Cologne Water Quality Control Act regulates wastes that have the potential to cause loss of a beneficial use of California's waters. This act requires the State Water Resources Control Board to establish reportable quantities of hazardous wastes and hazardous materials based on their potential to degrade the waters of the state. Any discharge of hazardous materials that is not consistent with the discharge requirements of the facility must be reported to the appropriate authorities.

8.13.8.3 Local LORS

The San Joaquin Zoning Ordinance requires the proposed TPP to comply with the appropriate setbacks required by the San Joaquin Fire Department for fire safety. The San Joaquin County Environmental Health Department would serve as the Certified Unified Program Agency (CUPA). Any other local agencies or LORS that are applicable to the proposed project would be addressed before the construction and operation of the facility.

8.13.9 Involved Agencies

The agencies that would be directly involved with overseeing regulatory requirements during the construction and the operations and maintenance phases of the proposed TPP are Tracy Fire Department, San Joaquin County Environmental Health Department, San Joaquin County Public Works Department – Solid Waste Division, and the DTSC. Agency contacts are presented in Table 8.13-3.

8.13.10 Waste Management Permits Required

Prior to construction of the proposed TPP, the project would obtain EPA identification number from the DTSC. Application and qualification for this identification number are dependent on the quantities and characteristics of the wastes generated at the TPP.

8.13.11 References

- Buona, M. 2001. Telephone conversation with Marianna Buona, Customer Service for Safety-Kleen's Buttonwillow Facility. (661) 762-6200. June 8.
- Clark, L. 2001. Telephone conversation with Lois Clark, Alameda County Waste Management Authority & Source Reduction and Recycling Board. (510) 614-1699. July 11.
- Harding ESE, 2001. Phase 1 Environmental Site Assessment: GWF Power Systems, Tracy Peaker, South of Southern Pacific Railroad and North of Delta-Mendota Canal, Tracy, California. June 20.
- Moroz K. Telephone conversation with Karen Moroz, Alameda County Environmental Health Department. (510) 567-6757. July 11.
- Smith, A. 2001. Telephone conversation with Allen Smith, Environmental Manager of Safety-Kleen Westmoreland Facility in Imperial County. (760) 344-9400. June 8.
- SWIS, 2001. Solid Waste Information System. <http://www.ciwmb.ca.gov/SWIS/>.
- Yarborough, T. 2001. Telephone conversation with Terry Yarborough, Executive Secretary of Chemical Waste Management's Kettleman Hills Facility. (559) 386-6115. June 9.

TABLES

Table 8.13-1
Hazardous Wastes Generated During Construction Phase

Hazardous Waste	Description	Approximate Quantity Generated
Empty hazardous material containers	Contains various hazardous materials residues	1 cubic yard/week
Solvents, used construction equipment lube oils, paint, adhesives, glycol, and wastewater contaminated by oil, etc.	Various hazardous wastes	7 to 10 55-gallon drums/month
Used and waste oil during CT lube oil flushes	Excludable recyclable material	<55 gallons/3 weeks
Oil rags, oil absorbent from CT lube oil flushes	Contaminated with excludable recyclable material	1 to 2 55-gallon drums/3 weeks
Oily rags, oil absorbent generated during normal construction activities, excluding lube oil flushes	Contaminated with excludable recyclable material	3 to 4 55-gallon drums/month
Consumer-type lighting lamps	Waste lamps	<50 pounds/year
Spent batteries; lead acid	Potentially recyclable	145 pounds/year
Consumer-type batteries	Waste batteries, dry, containing potassium hydroxide, solid (contains manganese dioxide)	65 pounds/year

CT = combustion turbine

Table 8.13-2
Hazardous Wastes Generated During Operations and Maintenance Phase

Hazardous Waste	Description	Approximate Quantity Generated
SCR and CO catalysts	Waste catalyst (contains heavy metals)	17,500 pounds/3–5 years
Lubricating oil	Excludable recyclable material	7,400 gallons/6 years
Used oil, glycol	Excludable recyclable material	300 gallons/year
Paint & thinner waste	Waste paint-related material, 3, UN1263, PG II (RCRA Designated Waste Code D001)	<100 gallons/year
Lead acid batteries	Waste batteries, wet, filled with acid, 8, PGIII, UN3028	Less than 575 pounds/year
Natural gas filters	Spent natural gas filters, non-RCRA hazardous waste, solid	75 pounds/year
Consumer-type batteries	Waste batteries, dry, containing potassium hydroxide, solid (contains manganese dioxide)	Less than 65 pounds/year
Fluorescent lamps	Used lamps, “universal waste”	Less than 50 pounds/year
Oil filters	Used filters, “excludable recyclable materials”	Less than 500 pounds/year
Nonempty aerosol cans	Waste aerosols, 2.1 (contains flammable liquid)	Less than 50 pounds/year
Sandblast media	Spent sandblast media, solid	150 pounds/year
CO = carbon monoxide RCRA = Resource Conservation and Recovery Act SCR = selective catalytic reduction		

**Table 8.13-3
Involved Agencies and Agency Contacts**

Agency	Contact	Reason for Involvement
San Joaquin County, Environmental Health Department	Donna Heran (209) 468-3429	Certified Unified Program Agency
San Joaquin County, Public Works Department, Solid Waste Division	Joyce Smith (209) 468-3066	Assistance with waste management facilities and similar information
Tracy Fire Department	Carol Zandona (209) 831-4700	Fire safety
Department of Toxic Substances Control Sacramento, CA	EPA ID Center (916) 324-1781	Application for EPA Identification Number.

Table 8.13-4
Waste Management Laws, Ordinances, Regulations, and Standards

Jurisdiction	Authority	Administering Agency	Requirements & Compliance	AFC Conformance Section
Federal	RCRA, 40 CFR §§260–272	EPA, Region IX	Management of hazardous wastes. California is an authorized state for RCRA.	8.13.2
	49 CFR §§172, 173, and 179	CHP and DOT	Project will meet standards for labels, placards, packaging, and markings on hazardous waste shipments.	8.13.2
	42 USC §6922 Solid Waste Disposal Act/RCRA	EPA, Region IX and Cal-EPA; DTSC	Project will meet standards for record keeping, labeling practices, notification requirements, use of a manifest system, and reporting requirements from generators.	8.13.2
State	Hazardous Waste Control Act of 1972, as amended; California Health & Safety Code §25100 et seq.; 22 CCR 66001 et seq.	DTSC; San Joaquin County Environmental Health Services Department	Management of Hazardous wastes.	8.13.2
	22 CCR §67100	San Joaquin County Environmental Health Services Department	Project will prepare plan for reducing hazardous waste generation, and prepare associated performance report.	8.13.5
	California Health & Safety Code §25500–25541	CIWMB; San Joaquin County Public Works Department, Solid Waste Division	Project will ensure non-hazardous wastes are disposed of separately and appropriately from hazardous wastes.	8.13.2
	California Integrated Waste Management Act of 1989, PRC §40000 et seq.	CIWMB; San Joaquin County Public Works Department, Solid Waste Division	Management of Solid Waste	8.13.2

Table 8.13-4 (continued)
Waste Management Laws, Ordinances, Regulations, and Standards

Jurisdiction	Authority	Administering Agency	Requirements & Compliance	AFC Conformance Section
State	22 CCR §§66260–66270	DTSC; San Joaquin County Environmental Health Services Department	Project will comply with regulations for generators of hazardous wastes.	8.13.2
	California Porter-Cologne Water Quality Control Act	SWRCB; RWQCB Central Valley Region	Project will comply with waste discharge requirements for septic system and injection wells, if applicable.	8.14.2
Local	San Joaquin County Zoning Ordinance, Development Standards 19.80.030	San Joaquin County Engineering and Design Services Department and Tracy Fire Department	Project will comply with safety setbacks as required by the City of Tracy Fire Department.	8.7.3.1, 8.7.3.2
Industry Codes	AICHE–Center for Chemical Process Safety, 1985 Guidelines	California OES	Project will comply with chemical hazard evaluation procedures as required.	8.12.6

AICHE = American Institute of Chemical Engineers
CCR = California Code of Regulations
CFR = Code of Federal Regulations
CHP = California Highway Patrol
CIWMB = California Integrated Waste Management Board

DOT = Department of Transportation
PRC = Public Resources Code
RCRA = Resource Conservation and Recovery Act
RWQCB = Regional Water Quality Control Board
USC = United States Code